

Work Order ID 98683

98683

Page 1

March-20-13 10:19:16 AM

Item ID: 647.1712 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Gusset
 Start Date: 3/20/13 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 3/20/13 Req'd Qty: 4.00 *4* Customer:
 Reference: rework-prime

Approvals: Process Plan: W Date: Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.1700	N/C								

190 0.00
 190
 SprayPaint Memo 0.00
 Spray Painting PULL FROM STOCK: 4 X 647.1712 B92006 (ROUTE WAS INCORRECT- NO PRIMING) 130320
 PRIME IAW MIL-P-23377J TYPE1 CLASS N AS PER DWG. (SEE NOTE 3)
 CARDINAL 4860-50 PRIMER BATCH: 124204

200 QC14- Inspect Spray Paint 0.00
 200
 QC Memo 0.00
 Quality Control

Work Order ID 98683

98683

Page 2

March-20-13 10:19:16 AM

Item ID: 647.1712 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Gusset
 Start Date: 3/20/13 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 3/20/13 Req'd Qty: 4.00 *4* Customer:
 Reference: rework-prime

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	Identify as per dwg & Stock Location: <i>Med</i>	0.00							
210									
Packaging	Memo <i>Fab</i>	0.00							
Packaging	RE-IDENTIFY USING NEW B/N <i>Russ</i>								
	IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV								
220	QC21- Final Inspection - Work Order Release	0.00							
220									
QC	Memo	0.00							
Quality Control									

13/4/10 *AD*

AD 13-04-10

Picklist Print

March-20-13 10:19:26 AM

Page 1

Work Order ID: 98683

Parent Item: 647.1712

Parent Item Name: Gusset

Start Date: 3/20/13

Required Date: 3/20/13

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 12.10.04 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.1712 Gusset		Manufactured	No				Each	0.0000		4			

92006
u 130320

Work Order ID 92006

October-19-12 1:18:27 PM

98683

92006

Page 1

Item ID: 647.1712

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Item Name: Gusset

Stop *NS2*

Start Date: 19/10/2012 Start Qty: 2.00

2

Cust Item ID:

Required Date: 02/11/2012 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12-10-19 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.1700	N/C								
110		0.00							
110									
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg								
	Dwg Rev: <u>N/C</u>								
	Prog Rev: <u>N/C</u>								
7675 . 050	2-Deburr if necessary								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.00							
Quality Control									

⊕

12-10-22

⊕

12-10-22

Work Order ID 92006

October-19-12 1:18:27 PM

92006

Page 2

Item ID: 647.1712

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Gusset

Start Date: 19/10/2012 Start Qty: 2.00

2

Cust Item ID:

Required Date: 02/11/2012 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130 QC8- Inspect parts - second check

0.00

130

QC Memo

0.00

Quality Control

140 Form as per dwg

0.00

140

Brake NC Memo

0.00

Brake NC

150 QC5- Inspect part completeness to step on W/O

0.00

150

QC Memo

0.00

Quality Control

151

Outsource for Anodize as per dwg
Issue A/O 210.18293 CD 12/10/13

152

Packaging Receive and check for damage

153

QC 5 DAS 16 12/10/13 (4)

NCR ☒ Yes ☐ No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: AW Date: 12/11/24QA Closed: 1/2 Date: 1/1

Work Order: <u>92006</u> Part No. <u>647-0712</u> NCR No. <u>12-20100</u>				DISPOSITION Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input checked="" type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
<input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input checked="" type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved	<u>12/10/23</u>	<u>130</u>		piece was out of tolerance Try out & first time made the part QND	<u>12/11/24</u>	Sup - destroy no repair <u>\$54.80</u>	<u>SA</u> <u>12/13</u>	<u>SMB</u> <u>12/13</u>	<u>5</u> <u>12/13</u>		
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input checked="" type="checkbox"/> Other <u>1st time using Bending Part.</u>		

Work Order ID 92006

October-19-12 1:18:27 PM

92006

Page 3

Item ID: 647.1712

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Gusset

Stop *NS2*

Start Date: 19/10/2012 Start Qty: 2.00

2

Cust Item ID:

Required Date: 02/11/2012 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: ST438	0.00							
160									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.00							
Quality Control									

4X

SP

12-11-14

12/11/15

NE

12-11-14

Picklist Print

October-19-12 1:18:31 PM

Page 1

Work Order ID: 92006

92006

Parent Item: 647.1712

647 1712

Parent Item Name: Gusset

Start Date: 19/10/2012

Required Date: 02/11/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 12.10.04 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6S.050		Purchased		No		110	sf	33.4000	0.4123	0.868	2.		

M7075T6S 050

7075-T6 SHEET .050

**

B210-82

Location

Loc Qty

Loc Code

MAT022

33.4

118654

33.4

118654

5

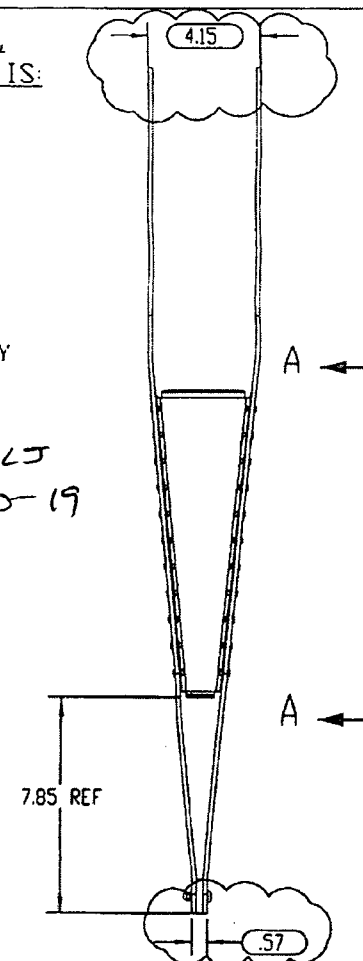
APICAL INDUSTRIES, INC.		ENGINEERING CHANGE NOTICE NO. 02937		SHEET 1 OF 1	
		DWG NO. 647.1700	REV: NC	PREPARED BY J. JACKSON	DATE: 07/14/10
		DWG TITLE: SKID DEFLECTOR ASSY			
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	OR <i>[Signature]</i>	EFF: CURRENT ORDER
REASON: REVISED F/N 8 AND NOTE 3. ADDED INSPECTION DIMENSIONS TO DRAWING VIEWS.					

SHEET 1, ZONE A1 IS:

3 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK;
PRETREAT PRC-DESOTO PR-148 ADHESION PROMOTER, COLOR BLUE;
PRIME IAW MIL-P-23377J TYPE I CLASS N

SHEET 2,
ZONE A1 IS:

NOT TO BE
RETURNED TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 92006 MLJ
12-10-19



8	R	601.1622	1	SCREW	MS27039-1-14 /
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED:					<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRU <input type="checkbox"/> FMS <input type="checkbox"/> ICA <input checked="" type="checkbox"/> BOM
CHANGE CATEGORY					DER REVIEW REQUIRED
<input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR					<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

THE INFORMATION CONTAINED ON THE DEPARTMENT OF THE SECRETARY OF
IS UNCLASSIFIED AND DERIVED FROM A PART OF A SOURCE WHICH
THE DEPARTMENT DEEMED TO BE NECESSARY TO PROMOTE

1. MATERIAL: 7075-T6 ALUMINUM PER AMS-QQ-A-250/12
2. MATERIAL: 6061-T6 ALUMINUM BAR IAW AMS-QQ-A-250/11
3. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2.
COLOR BLACK: CARDINAL 4860-50 PRETREATMENT PRIMER:
PRIME IAW MIL-P-23377J TYPE I CLASS N
4. DEBURR AND BREAK ALL SHARP EDGES
5. IDENTIFY IAW MPP-120

Exploded view diagram of a mechanical assembly. The diagram shows two curved, ribbed components (1 and 2) being joined by a central bracket (3). A pin (4) is used to secure the assembly, with a washer (5) and a nut (6) on the other side. A small rectangular plate (7) is attached to the bottom of component 2. A small circular component (8) is also shown near the pin. Dimensions and material specifications are provided for several parts.

Dimensions and specifications shown in the diagram:

- 1: 1/2" x 1/4" x 1/8"
- 2: 1/2" x 1/4" x 1/8"
- 3: 1/2" x 1/4" x 1/8"
- 4: 1/2" x 1/4" x 1/8"
- 5: 22 PL
- 6: 1/2" x 1/4" x 1/8"
- 7: 2 PL
- 8: 1/2" x 1/4" x 1/8"

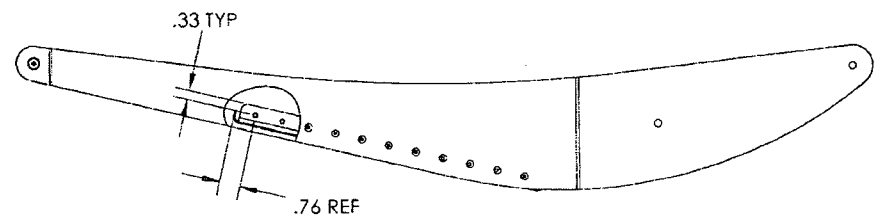
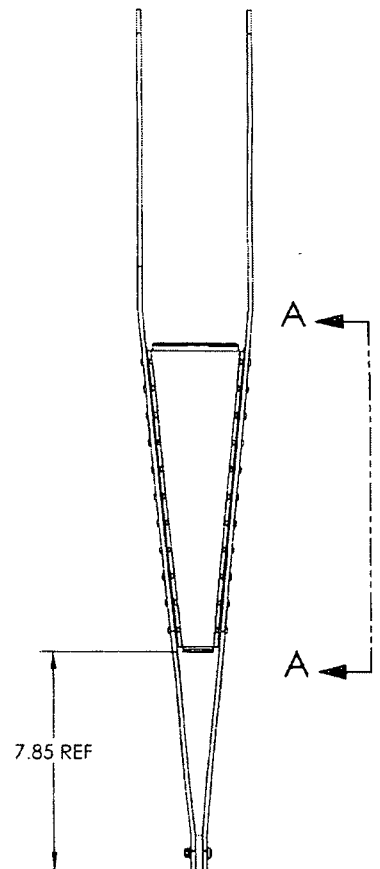
02933

	1	8	601.2637	SCREW	MASCPDZ-1+3	
	1	7	601.2943	LOCKNUT	NSTWJZ-3	
	2	6	601.1007	WASHER	MASI14P90000H	
	22	5	601.1915	RIVET	CXSD1B-Z+C	
	1	4	647.1713	SPACER		A
	1	3	647.1712	GUSSET		A
	1	2	647.1711	PLATE		A
	1		647.1710	PLATE		A
	X		647.1701	SKID DEFLECTOR ASSY		
	.1701	FIND #	PART #	DESCRIPTION	MATL	SPEC
QTY				PARTS LIST		
NEXT Assy IS:		DRAWING DATE DRAWINGS BY CHECKED BY DESIGNED APPROVAL DATE OF REVISION		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92036-3512 (760)724-53		
647.1300		1-COMPONENT P BRAND PD				
		OTHER COMMENTS HERE		SKID DEFLECTOR ASSY		
		REVISIONS: REV NO DATE BY DESCRIBE CHANGES		DWG CODE DWG NO	647.1700	REV NO
				SCALE 1:10 INCH	L SHEET	T F E T

92006

1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
2. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.
3. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.

REV	DESCRIPTION	DATE	APPROVED

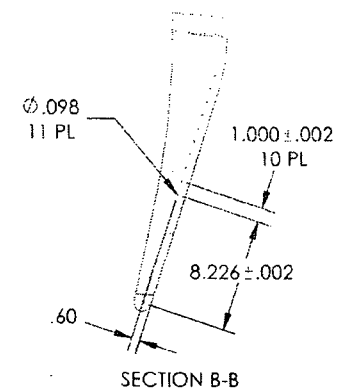
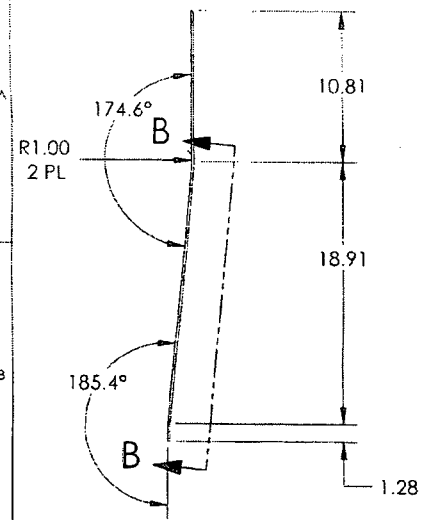


SECTION A-A

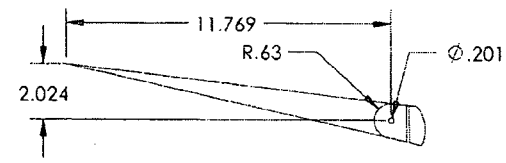
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3312 (760)724-5300	
SKID DEFLECTOR ASSY	
PART NO. 647.1700 REV. 1/76	SHEET 2 OF 5

92006

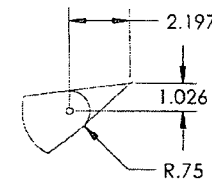
THESE DIMENSIONS ARE BASED ON THE ASSUMPTION THAT THE PARTS ARE MANUFACTURED TO THE DIMENSIONS SHOWN. IF TOLERANCES ARE NOT SPECIFIED, THE DIMENSIONS SHALL BE AS SHOWN.



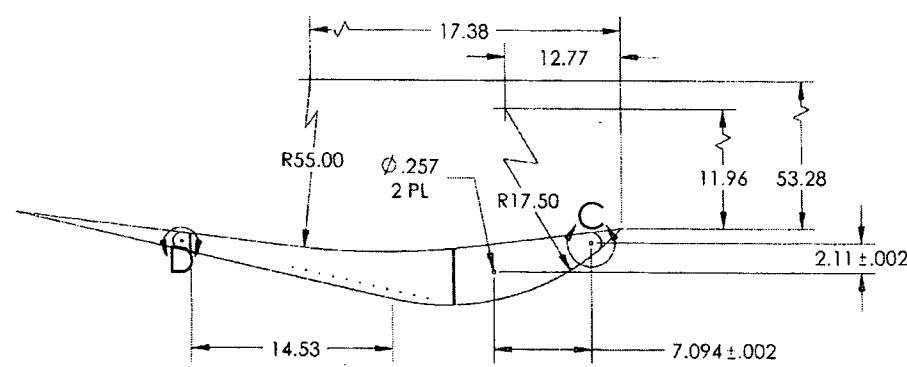
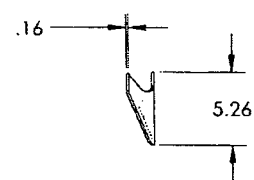
647.1711 SHOWN
647.1710 OPPOSITE



DETAIL D



DETAIL C

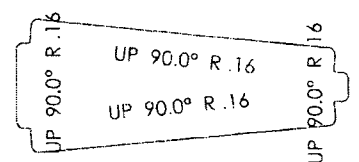
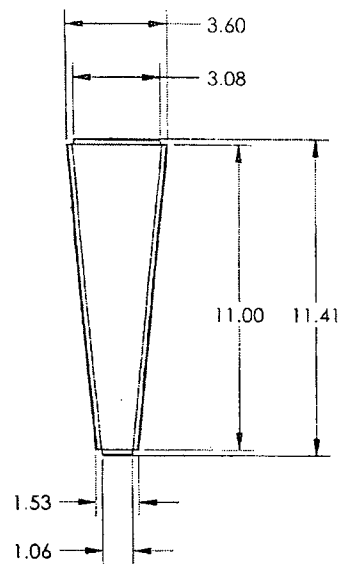


ORIGINAL DATE		APICAL INDUSTRIES	
DRAWN BY		2608 TEMPLE HEIGHTS DR.	
CHECKED BY		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DESIGNED BY		SKID DEFLECTOR ASSY	
CONTRACT NO.		SCALE: NONE	
UNLESS OTHERWISE SPECIFIED		SHEET 3 OF 5	
DIMENSIONS ARE IN INCHES			
DIMENSIONS ARE IN INCHES			
DIMENSIONS ARE IN INCHES			
DIMENSIONS ARE IN INCHES			

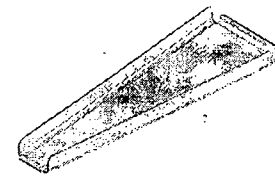
92006

ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES
 ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED

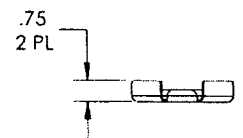
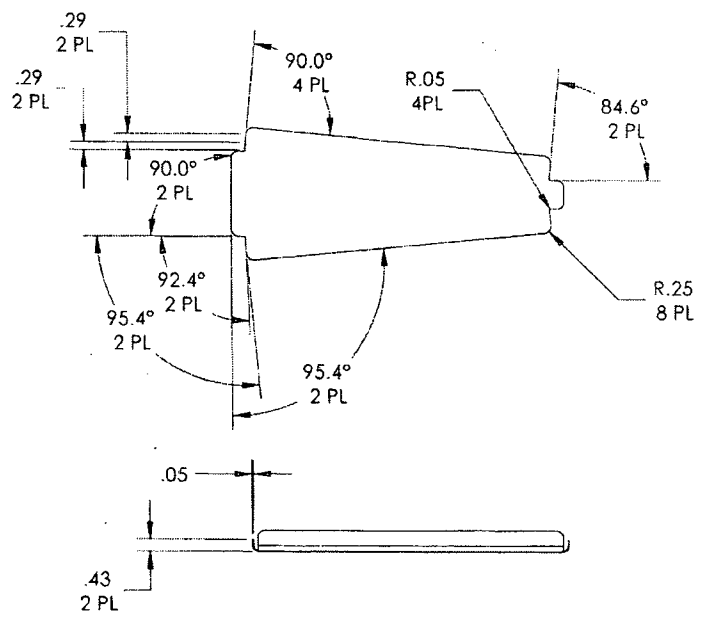
REV	DESCRIPTION	DATE	BY



FLAT PATTERN



647.1712

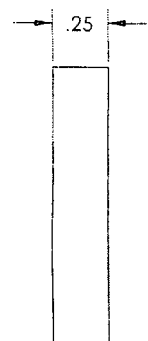


DATE: 10/1/00 DRAWN BY: J. G. PETER CHECKED BY: J. G. PETER APPROVED BY: J. G. PETER CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300 SKID DEFLECTOR ASSY
SPEC. CHANGE NO. 1 REVISIONS ARE INDICATED BY DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED SCALE: NONE	SHEET 4 OF 5 647.1700 R. 07/01/00 N/C

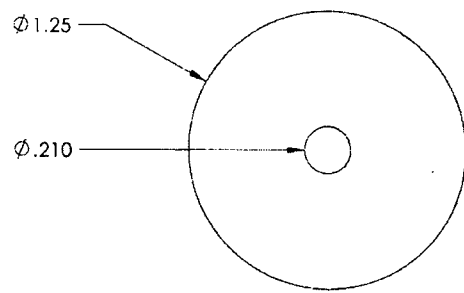
92006

ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER UNLESS OTHERWISE SPECIFIED.
 ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER UNLESS OTHERWISE SPECIFIED.
 ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER UNLESS OTHERWISE SPECIFIED.

REV	DESCRIPTION	DATE	BY



647.1713



APICAL INDUSTRIES	
2608 TEMPLE HEIGHTS DR.	
OCEANSIDE, CA 92056-3512 (760) 724-5300	
SKID DEFLECTOR ASSY	
NO	REV
B	07/02/06
647.1700	N/C
SCALE: NONE	SHEET 3 OF 5

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577

OUTSTANDING PO REPRINT

Purchase Order ID PO18295

Purchase Order Date 10/31/12

PO Print Date 11/05/12

Page Number 1 of 2

Order From :

VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	613-446-4544	Requisition Nbr	
Vendor Fax	613-446-4556	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Unit Price	Extended Price
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Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED \$

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
2	92006	647.1712 GUSSET	11/09/12 Yes	4.00	Dart Truck	\$5.9490	\$23.80

Special Inst: FINISH: HARD BLACK ANODIZE AS
PER
IAW MIL-A-8625, TYPE III, CLASS 2
Line Total: \$23.80

3	90584	647.4713 BRACKET	11/09/12 Yes	50.00	Dart Truck	\$5.9490	\$297.45
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Special Inst: FINISH: HARD BLACK ANODIZE AS
PER
IAW MIL-A-8625, TYPE III, CLASS 2
Line Total: \$297.45

CERTIFICATE OF CONFORMITY
REQ'D UPON DELIVERY

11/05/12



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada

Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62036

Date: 09-Nov-12

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To


DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
1 lot	Part: ASST 4 PCS 647.1712 50 PCS 647.4713 59 PCS 647.2010 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 Job: 20120687	Rev:	
Certificate of Conformance			
A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.			
ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY			
DATE: 9/11/12			
CERTIFIED SIGNATURE: 			
RECEIVER SIGNATURE: _____			